



Summary of projects and results from topic
Implementation and Policy Formulation

Author: Sandra Hanzl and Michael Meschik
(BOKU)

Implementation and Policy Formulation

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1. INTRODUCTION AND METHODOLOGY

This report has been compiled by **University for Bodenkultur, Institute for Transport Studies (BOKU – ITS)** to summarise the conclusions of the activities undertaken on the key topic **Implementation and Policy Formulation** as part of Work Package 2 of the PORTAL project.

1.1 Methodology

Eight projects were allocated under the key topic “Implementation and Policy Formulation”. The internet was used to get at the information about each project to complete the database.

Using the Acronym each project was found at the CORDIS website and provided the first characteristics about the project. The search for the official homepage, which mostly was provided by the co-ordinating organisation, was next. The TRANSTALK project, which was not situated on the CORDIS website, was found via search engines. The quality of the available facts about each project was rather variable.

To get further information for the data inventory (materials, experts, study sites, LEIs) the project co-ordinators were contacted via e-mail with requests on the items above and to have a look at the completed data sheets. In two cases (CONPASS, REFLEX) we talked to a researcher who was involved in the project.

Some **problems** have arisen while trying to compile all the information concerning the search via the Internet, the contact of persons/organisations and the choice of the materials in particular.

- *Internet*: The main problem concerned the homepages of the partner organisations involved. Some homepages were under construction, some were only available in the national language (Italian, Dutch, etc.) with no opportunity to switch to English. Some organisations even had no homepage, or no link to the project. In one case no project homepage existed (REFLEX). However the internet was the best way to get a lot of information within a short space of time.
- *Contacts*: The contact with the project co-ordinators via e-mail generally worked well. Nevertheless, new insights were seldom gained. The request about the IPR-status was often not clearly answered and some requests are still not answered. In one case the persons who were concerned with the project no longer worked at the responsible organisation.
- *Experts*: It was not clear who of the partners is to be considered an expert. Therefore all project partners are in the database.

- *Materials and IPR-status*: Projects related with this key-topic resulted in few/ no “materials”.

Almost no results (deliverables, final reports) of the projects are to be considered as materials in terms of possible course materials for PORTAL. Besides which, the deliverables are mostly far too complex and detailed for outsiders, hence only the final report (which is actually a compromise, too) is specified in the database. “These final reports are of public source and if cited there should not be any problems with copyrights” (Panu Kuosmanen, HUT).

We propose to generate clearly structured tables (perhaps figures) and bullet lists out of these reports in WP4.

We propose that all other KT-experts inform us, whether they could locate any promising/interesting facts on “implementation and policy formulation” in their allocated projects. Please send an e-mail to portal@mail.boku.ac.at including at least a short description what and where you found it. Attach materials when possible.

2. IMPLEMENTATION AND POLICY FORMULATION

2.1 Description of the key-topic Implementation And Policy Formulation

Implementation is normally regarded as a vital and often neglected phase of strategic planning.

Most of the projects stop at this point; they present a set of measures with regard to defined objectives and forget how to implement them. “The implementation process embraces all actions that take place during the realisation of the plans, i.e. budgeting, construction of infrastructure and the undertaking of necessary institutional changes for policy measures (TENASSESS, Annex II)”. What is more, it comprises the analysis of social and political acceptability of measures and the sensitivity of citizens, politicians, journalists and experts for objectives and programmes before and after implementing transport measures. Public awareness and information campaigns as well as the installation of a permanent marketing procedure may help to enhance the acceptability of transport plans or single measures (REFLEX).

Policy Formulation is an issue, which has to be considered at each stage of a transport planning process:

Strategic policies in transport cover a larger area and include long term strategies. These policies have to be farsighted and consequently implemented.

Regional and local transport policies are applied on regions, small areas (towns, villages, etc.).

Normally they have to submit to overall policies.

All transport policies should basically have common features such as:

- inclusion of all affected parties (transport operators, transport users, politicians, etc.);
- inclusion of all affected aspects (transport, modes of transport, health, environment, social policies, economics,...);
- approval of a majority (voters, experts,...);
- strategic view, logical and consistent layout and implementation over longer periods;
- possibilities to (re)adjust the policies based on feedback and evaluation, etc.

One problem of environmentally sound policies is that the measures to achieve transport systems heading towards sustainability are in most cases unpopular. It is therefore important to include information and planning-participation methods in the transport policies and in the implementation process.

Projects allocated to the key topic “Implementation and Policy Formulation”:

Acronym	Title	Contents
ASTRA	Assessment of transport strategies	Tool that analyses the long-term effect of the EU common Transport Policy not only for the transport system but also for the most important connected systems.
COMPASS	Better connections in European passenger transport	Experience-based strategies to improve cross-border local and regional passenger transport in urbanised areas.
REFLEX	Reversible and Flexible measures for energy saving in transportation management	Comparison of reversible and flexible measures in terms of energy reducing capabilities and practical feasibility.
MAESTRO	Monitoring Assessment and Evaluation Scheme for Transport policy Options in Europe	Tool to assist in the selection, design and evaluation of transport projects.
OPTIMA	Optimisation of Policies for Transport Integration in Metropolitan Areas	Transport measures in nine european cities were tested with regard to economic efficiency and sustainability.
FATIMA	Financial Assistance for Transport Integration in Metropolitan Areas	Transport measures in nine european cities were tested with extended objective functions with regard to financial feasibility.
TENASSESS	Policy Assessment of trans-european networks and common transport policy	Policy-making is the main theme in the TENASSESS project.
TRANSTALK	Thematic Network on Policy and project Evaluation Methodologies	Framework for the integration of various policy and policy assessment methodologies in the field of transport.

2.2 Results of the – ASTRA project

ASTRA Assessment of transport strategies

Description of the project:

In sciences, real systems usually are split up and allocated to different disciplines. This way of scientific division of research - often referred to as the Descartes-type of structuring scientific analysis - abstracts from the inter-relationships between the elements of the system and the dynamics which are induced by feedback mechanisms.

The ASTRA project tries to re-establish the inter-relationships between four research disciplines: macroeconomics, regional economics and land use, transport and environment.

Partial models of these four disciplines are integrated into one System Dynamics

model. The purpose of this model is to carry out a strategic analysis of the Common Transport Policy (CTP) including the construction of the Trans European Networks (TEN) in terms of the long-term development of key variables in the four research fields.

Summary concerning:

- materials available: Final Report
- experts: IWW (Werner ROTHENGATTER – D), TRT (Marco PONTI – I)
- study sites: there are no study sites.
- leading educational institutes: Universitaet Karlsruhe (D)
- websites: www.cordis.lu/transport/src/astra.htm, <http://www.iww.uni-karlsruhe.de/ASTRA/> (ASTRA – homepage)

Results of the project:

The major output of the ASTRA project is an operational model – called the ASP (ASTRA System Dynamics platform) – for long-term policy assessment of European transport policy with a spatial representation on a functional basis. It integrates the macroeconomic sub-module (MAC), regional and land use sub-module (REM), the transport sub-module (TRA) and the environment sub-module (ENV) into one model. The establishment of interfaces between these originally separate models is one of the added values of the ASTRA project.

The benefits of the ASTRA model are explained by presenting demonstration examples. These cover a reference scenario, five policy packages consisting of sets of measures and an integrated policy programme comprising most of the policy packages. The five policy packages can be described as:

- Improved emission and safety policy package (ISE), comprising regulatory policies like speed limit, emission legislation and enforced safety-belt usage.
- Increased fuel tax policy package (IFT), consisting of taxation policy like fuel tax and labour cost changes.
- Balanced fuel tax policy package (BFT), similar to IFT but modified taxation policy.
- Rail-TEN policy package (Rail-TEN), comprising taxation policy and infrastructure policy and
- All-TEN policy package (All-TEN), similar to Rail-TEN but modified infrastructure policy.

The integrated policy programme IPP (integrating ISE, TFT, Rail-TEN and the BFT without the introduction of the kerosene tax) produces the best results considering the whole range of economic, environmental and (un-)employment indicators. But it seems, that also with the IPP environmental sustainability e.g. in terms of CO₂

emissions will not be reached. The most important points might be resumed as follows:

The policy packages show a plausible range for their effect on economic performance.

None of the tested packages is able to lead to the fulfilment of Kyoto requirements for greenhouse gases emissions: the best result is a stabilisation at the 1990 level due to the measures included in the emission and safety policy.

No emissions on ground level will be reduced coming at least very close to a sustainable level in the next decade in the reference scenarios and all policy packages.

No further significant improvement can be identified for road accidents including fatalities.

The integrated policy programme provides synergies between the single policy measures and generates the highest economic benefit, but not in all four macro regions.

Air transport growth is significant in all policy packages and in some cases it counterbalances most of the policy environmental benefits of the reduction of road transport.

The investment multipliers for the Rail-TEN and the All-TEN policies indicate that in the long-run both policies are economically positive, even though they do not foresee an economic growth induced by transport investments.

Some of the most important features for ASTRA are the stepwise and incremental policy implementation, the multiple policy package construction, the time-path indicators and intensity indicators. Looking at the constructed scenarios it becomes evident how important these features are for practical policy testing. As in reality, all policies are defined as functions of time, i.e. there is not one policy, which is implemented once and remains unchanged.

The results of the ASTRA demonstration examples reveal that the model is able to simulate the implementation of policy packages consisting of policy measures that are taken at different points of time and with varying intensity (incremental policy design). Thus the model is able to unfold synergies between different policies and to design advantageous policy programmes.

No real situations have been tested. ASTRA shows the capabilities of combinations of policies and calculates the total effects within a time horizon of 25 years.

Materials

Final report: (48 pages) can be downloaded from the website <http://www.iww.uni-karlsruhe.de/ASTRA/>

The contained figures concerning the reference scenario of the EU15 and the comparison of policy packages results may be interesting and useful.

ASTRA Methodology – Appendices: provides detailed information about models, scenarios and policies. It can be downloaded from the website <http://www.iww.uni-karlsruhe.de/ASTRA/>

2.3 Results of the CONPASS Project

CONPASS Better connections in European passenger transport. The project is still in progress (till June 2002).

Description of the project:

The project deals with experience-based strategies to improve cross-border local and regional passenger transport in urbanised areas. Special emphasis is given to public transport connections.

The CONPASS project aims at developing strategies and concepts for improvements of cross-border public transport supply. A major contribution of the project is a comprehensive insight into the type and nature of existing border barriers throughout Europe (including Eastern Europe) as well as providing the necessary tools and experience of best practices on how to overcome these barriers in local and regional public transport.

The technical achievement of this project is the toolbox containing the validated methodological framework for data collection and analysis as well as the technical, organisational and policy recommendations. The targeted user groups of the project's results are local, regional and national authorities, transport operators and "cross-border" regional associations.

Summary concerning:

- materials available: none (yet)
- experts: IVV-Aachen (Stephan KRUG)
- study sites: There will probably be 6 case sites.
- leading educational institutes: STU Slovak University of Technology (Bystrík Bezák – Sv)
- websites: www.cordis.lu/en/home.html; www.conpass.org/ (CONPASS homepage)

Results of the project

This project is still in progress. It will be finished in June 2002.

Materials

Dissemination is expected at the end of the project in June 2002.

2.4 Results of the REFLEX Project

REFLEX Reversible and Flexible measures for energy saving in transportation Management

Description of the project

The project aims to demonstrate the possibility of saving energy by transport system rationalisation with combined and integrated actions on traffic and mobility.

Reflex had the following main objectives:

- to review and investigate the technological options and the international experiences in the transport sector regarding energy efficiency;
- to devise a common analytical framework for assessing and evaluating different mixes of measures;
- to enable a comparison, in terms of economical efficiency, environmental quality and social equity, of reversible and flexible measures, in order to assist the decision making process in urban planning;
- to define policy implication for energy saving related to 'soft' interventions on traffic and mobility;
- to facilitate ongoing communication between EU Member States and East European Countries.

Summary concerning

- materials available: Final Report
- experts: Politecnico di Milano (Alberto COLORNI – I), Universitat fuer Bodenkultur (Gerd SAMMER – A), EuroTRANS (Manos VOUGIOUKAS – UK)
- study sites: Como (I), Volos (Gr), Wiener Neustadt (A), York (UK)
- leading educational institutes: Universitat fuer Bodenkultur (Gerd SAMMER – A); Politecnico di Milano (Alberto COLORNI - I); Consorzio Poliedra (Alberto COLORNI – I)
- websites: dbs.cordis.lu and www.boku.ac.at/verkehr/reflex.htm There is no official homepage of the REFLEX project.

Results of the project

The REFLEX project aimed to enable a comparison, in terms of transport performance, energy reducing capabilities and practical feasibility, of different reversible and flexible measures, in order to assist decision-making-processes in urban transport planning.

These Transport Demand Management (TDM) measures were classified:

- Supply Measures: Park & Ride, Car-pooling, Increments of PT, Dial a ride,...

- Pricing Measures: Road pricing, Parking pricing, PT pricing,...
- Fiscal Measures: Vehicle Tax, Fuel Tax,...
- Regulation Measures: Access control, Parking management, Traffic calming, Improvements for pedestrians and cyclists,...
- Complementary Measures: Traffic light programmes, Through ticketing, Staggered activity times,...

Furthermore, out of the TDM packages various combinations of elementary measures were set up to simulate different scenarios. The main objectives of the suggested packages had to be the reduction of car usage, increase in the modal share of low impact means of transport (namely public transport, cycling, park & ride facilities) and thus reduction in fuel consumption and increase in energy efficiency.

The REFLEX project involved four test sites, represented by cities of small or medium size and belonging to four EU member states, where these measures and packages were analysed. The results of this survey concerning the TDM were the following:

- *Pricing measures* are the most efficient measures to reduce energy consumption, but with the lowest rate of acceptance in European cities: at the moment, there is no majority supporting this bundle of measures. Therefore before the implementation process of pricing measures starts, an intensive awareness campaign is necessary. The responsibility of the measures is mainly at the federal level, the cities have no direct influence in the decision process, namely for fuel-tax and vehicle-tax measures.
- Measures *supporting and promoting non-motorised transport modes* as cycling and walking are of significant effect in reducing energy consumption in European cities. They are well accepted, but also awareness campaigns are necessary (especially in countries with a negative image of walking and cycling) to transform this acceptance to an increasing usage of these transport modes. These bundles of measures are the most efficient ones, which can be implemented due to a decision at the local level. Therefore they are highly recommended.
- Measures for restricting *private car traffic* are efficient, but currently there is no clear majority supporting these measures in the communities. A public awareness campaign for saving energy could influence this situation. In order to raise the acceptability of measures like access control or parking management, clear alternatives should be given to the citizens to fulfil their mobility needs. This leads to the recommendation to combine car-restricting measures with cycling and walking measures in order to intensify significantly the effects resulting from to these measures.

If restricting private car traffic is implemented without any of the other measures described above, non-captive users of the private car will avoid the restricted zones and will also accept longer trips to other destinations. This can lead to impacts of increasing energy consumption in the traffic system that are not desirable. Most of the measures are financial and the responsibility at the local level.

- *Organisational measures* (car-pooling, staggered activity time) for reducing energy consumption are well accepted and with satisfying results from the point of view of saving energy resources. Problems of the implementation of these measures are the split of responsibility, the high degree of negotiation required for implementation and the need for a constant budget due to a permanent process of

managing the mobility, between users, local authorities and third parties. These measures need only a low investment budget.

- Measures regarding *raising attractiveness of public transport supply* are accepted best of all but with very low impact on reducing energy consumption. Nonetheless, these measures fit well as complementary measures to support measures restricting private car traffic. It should be also noted that it is not possible to raise the attractiveness of public transport to a level so that it will be competitive to private car traffic, if there is no congestion and the users are free to choose the mode of transport. Therefore there is no significant effect for smaller European cities.

Financial responsibility and decision making power of urban public transport supply and operations belongs mostly to local authorities, but there is an ongoing trend towards privatisation of PT.

It can be concluded that, if a high level of saving is to be reached, a pricing package is required, but also special attention must be paid to face the inevitable social opposition. On the contrary, if a compromise is to be reached between acceptability and network/energy results, packages of regulation, supply or complementary measures may be more appropriate.

Shortcut of the results:

- energy saving can be obtained in the transportation field;
- energy efficiency is obtained as a direct consequence of a better network operation and from a modal split less biased towards private traffic;
- greatest savings, if searched within reversible and flexible measures, do require *pricing* measures;
- pricing measures have extremely low rates of acceptance among citizens;
- regulation measures can easily combine good acceptance with an energy saving of 2-7%;
- packages of mixed measures (including pricing ones) may mitigate the social opposition to pricing and obtain significant energy effects.
- the importance of energy saving is greatly underestimated by the majority of citizens;
- a better awareness of the importance of energy saving and the highest acceptability of pricing measures is found among transport experts and politicians.

The social acceptability of measures was investigated by a survey at the four case sites. The results are based on the analysis of questionnaires and so reflect the opinions of the people (citizens, politicians, journalists, transport experts). The potential efficiency of the measures is assumed representative. It is therefore recommended to extract the main results in WP4 of PORTAL

Materials

- Final report (59 pages): It can be ordered from Roberto Cordone e-mail: cordone@fusb.eta.elet.polimi.it (Politecnico di Milano).

- Annex2: WP6 Policy implications: The results of the survey - social and political acceptability. cordone@fusberta.elet.polimi.it (Politecnico di Milano).

2.5 Results of the MAESTRO Project

MAESTRO Monitoring Assessment and Evaluation Scheme for Transport policy Options in Europe

Description of the project

MAESTRO provides practical advice on the selection, design and evaluation of transport-related pilot projects. It aims to strengthen the link between pilot projects and their contribution to identifiable policy aspects, thus bridging the gap between theoretical knowledge and practical applications and providing a synthesising role for pilot projects within the RTD Transport Research Programme.

The MAESTRO project identifies the following main goals:

- to conduct a review of existing evaluation methodologies, and assess their value in relation to policy objectives,
- to develop a MAESTRO methodology for the selection, design and evaluation of pilot and demonstration projects within the Transport RTD workplan,
- to develop evaluation procedures to be incorporated into the MAESTRO methodology,
- to play a supporting advisory role in the Transport RTD programme in the setting up and establishment of all pilot and demonstration projects,
- based upon the MAESTRO methodology, to produce practical guidelines for the selection, design and evaluation of pilot and demonstration projects in the Transport RTD workplan.

Summary concerning

- materials available: MAESTRO Guidelines
- experts: Transport & Travel Research Ltd (Laurie PICKUP – UK), University of Leeds (Alan PEARMAN – UK)
- study sites: there are no study sites.
- leading educational institutes: University of Leeds (UK), Università degli Studi di Roma "La Sapienza" (I), University of Twente (NI)
- websites: www.cordis.lu/transport/src/maestro.htm; www.europjects.ie/maestro/ (MAESTRO- homepage)

Results of the project

The MAESTRO Guidelines are to assist the full range of key actors involved in the selection, design, conduct and evaluation of Pilot and Demonstration (P/D) projects. These actors include the decision-makers, who develop transport policies and commission P/D projects; project managers, who develop project proposals and manage all stages of the P/D project; the expert users, who are the other active participants within P/D projects, for example, evaluation experts, technical experts, dissemination experts, quality control experts, and the stakeholders, who are not actively involved within the project, but who have an interest in its conduct or impacts.

The Guidelines assist the key actors within all types and levels of transport projects.

It provides the MAESTRO Methodology, which consists of seven sections:

- *Definition of the Objectives:* The first of the seven stages is to define the objectives of the P/D project. The Guidelines describe this process, showing that there are four hierarchical levels – Transport, Sector, Area and Application – specific.
- *Site-Selection and Pre-design:* The pre-design influences the site selection, and the site choice influences the pre-design. The Guidelines show the process of choosing among valid potential sites. Pre-design is the process of specifying the functionality of the applications or systems to be demonstrated, based on the defined objectives, user needs, and the site(s) characteristics.
- *Evaluation:* Evaluation is actually carried out at three separate stages:
 - at the very beginning (Initial) to estimate the dimensions of the project, and to identify expectations
 - after the detailed design, but before the demonstration phase starts (ex ante). This includes all the traditional “before” measurements, but also allows a major review to see whether to proceed, modify, or abandon
 - after the demonstration phase (ex post) – this is the substantial evaluation on which the decisions are made.
- *Design:* In this phase the detailed definition of hardware, software, and support items for the implementation are developed.
- *Ex-Ante Evaluation:* The goal of the ex-ante evaluation is to review the initial evaluation after completing the detailed design of the P/D project, and compare it to the do-nothing scenario. This will help to estimate better the detailed impacts of the P/D project.
- *Implementation of the Demonstration:* Having decided that the P/D project will provide reliable worthwhile results, the P/D project must be implemented as planned. The Guidelines consider the critical success issues, reporting, and verification.
- *Ex-Post Evaluation:* This phase will identify whether the early assumptions hold, whether the project was conducted as planned, what are the impacts, and what are the lessons. Evaluation tools cover monetary evaluation methods (CBA and CEA) and non-monetary methods (MCA and GAM).

After the project has been completed the Guidelines assist in the interpretation of the project results, give additional benefits including transferability, dissemination, pooling experience and common research and raises questions to consider before a decision is made about whether to proceed to full-scale implementation.

The Guidelines are too complex for teaching materials. They should be included in the form of an abstract.

Materials

- MAESTRO Guidelines: The MAESTRO Guidelines represent the major Output of the project. They can be downloaded from the website <http://www.europrojects.ie/maestro/guidelin.htm>

2.6 Results of the OPTIMA Project

OPTIMA Optimisation of Policies for Transport Integration in Metropolitan Areas

Description of the project

Overall objectives were:

- identification of optimal urban transport and land use strategies for a range of urban areas within the EU;
- comparison of the strategies which are specified as optimal in different cities and reasons for these differences;
- assessment of the acceptability and feasibility of implementation of these strategies both in the case study cities (Edinburgh, Merseyside, Vienna, Eisenstadt, Helsinki, Torino, Salerno, Oslo and Tromso) and more widely in the EU;
- use of the results to provide more general guidance on urban transport policy within the EU.

There is a subsequent project of OPTIMA named FATIMA.

Summary concerning

- materials available: Final Report
- experts: ITS (Anthony MAY – UK), TUW-IVV (Hermann KNOFLACHER – A), VTT (Veli HIMANEN – Fi)
- study sites: Edinburgh (UK), Merseyside (UK), Vienna (A), Eisenstadt (A), Helsinki (Fi), Torino (I), Salerno (I), Oslo (N) and Tromso (N)
- leading educational institutes: University of Leeds (UK), Technical University of Vienna (A)
- websites: <http://www.cordis.lu/transport/src/optima.htm>, www.its.leeds.ac.uk/projects/optima/index.html

Results of the project

The most important conclusion to be drawn from the nine cities is that the optimal strategies involve a combination of measures, and rely on synergy to be gained from implementing them together. There is no single best measure for any city, and there is certainly no best solution for European cities more general (See also results from REFLEX).

Separately for each city an acceptable set of transport and land use policy instruments was identified, and further extended to cover measures in use elsewhere in the EU. Based upon them, the following set of common measures was selected for use in an optimisation process:

- High public transport infrastructure investment
- Medium public transport infrastructure investment
- Low cost increase/decrease of road capacity (whole city)
- Increasing/decreasing public transport frequency (whole city)
- Road pricing (city centre)
- Increasing/decreasing parking charges (city centre)
- Increasing/decreasing public transport fares (whole city)

Currently available transport models of the cities were used to conduct a series of tests of combinations of these policy measures. The optimisation process was then applied to find the optimum set of values of these measures in terms of economic efficiency and sustainability (objective functions defined) for each city.

The *Economic Efficiency Optimum* is likely to involve:

- no new infrastructure investment;
- low cost improvements in road capacity;
- no use of road capacity reductions to discourage car use;
- improvements in public transport by increasing frequency and /or reducing fares;
- restrictions on car use involving either road pricing or increasing park charges.

The *Sustainability Optimum* is likely to involve:

- investment in new public transport infrastructure;
- similar levels of low cost improvement in road capacity;
- further improvement in public transport by increasing service levels and/or reducing fares;
- further restrictions on car use, involving either road pricing or increased parking charges.

The most frequent concern of the city authorities has been the financial feasibility of the proposals. However, as a result of the project concerning the nine case sites, it should be financially feasible to introduce economically optimal strategies in most cities. For the sustainability optima the affordability problem is more widespread. The pursuit of the most sustainable strategies will imply substantial financial outlay in most cities and the try to find slightly sub-optimal strategies, which are more affordable.

Legislation will be needed to enable optimal strategies to be implemented (e.g. road pricing). And finally, public acceptability will be a significant barrier with those measures that reduce service levels or increase costs. This implies the need for effective public relations campaigns, and carefully designed implementation programmes.

Policies are tested theoretically with objective functions with less practical reference. FATIMA, the subsequent project of OPTIMA, is more detailed with the same measures tested.

Materials

- Final report: The final report (87 pages) is not on the OPTIMA homepage, but you can order it from Paul Timms: PTIMMS@its.leeds.ac.uk. The OPTIMA homepage www.its.leeds.ac.uk/projects/optima/ provides reports of the single workpackages which mostly do not give more information about the project than the final report.
- Appendix B (from workpackage 30/40): shows the overall Model Structure of the nine cities, which might be interesting for special studies etc. It can be downloaded from the OPTIMA homepage www.its.leeds.ac.uk/projects/optima/

2.7 Results of the FATIMA Project

FATIMA Financial Assistance for Transport Integration in Metropolitan Areas

FATIMA is a follow up project of OPTIMA.

Description of the project

The overall objectives of this project were

- identification of the benefits to the private sector of optimal urban transport strategies, and the potential for obtaining private sector funding to reflect those benefits;
- determination of the differences between strategies optimised using public funds and those optimised by private funding initiatives;
- proposal of mechanisms by which private sector funding can be provided so as to achieve appropriately optimal transport strategies while maintaining quality of operation;
- use of the results to provide more general guidance on the role of private sector funding for urban transport in the EU.

Summary concerning

- materials available: Final Report
- experts: ITS (Anthony MAY – UK), TUW-IVV (Hermann KNOFLACHER – A), VTT (Veli HIMANEN – Fi)
- study sites: Edinburgh (UK), Merseyside (UK), Vienna (A), Eisenstadt (A), Helsinki (Fi), Torino (I), Salerno (I), Oslo (N) and Tromsø (N)
- leading educational institutes: University of Leeds (UK), Technical University of Vienna (A)
- websites: www.cordis.lu/transport/src/fatima.htm, www.its.leeds.ac.uk/projects/fatima/

Results of the project:

As a subsequent project of OPTIMA the same measures were tested in the nine European cities as well. The method differed by not only using two objective functions (Economic Efficiency and Sustainability) but specifying and extending them to seven. The objective functions covered a range of differing regimes with respect to constraints on public finance and the involvement of the private sector.

It was found that, in a majority of the case study cities, optimal socio-economic policies could be funded by road pricing or increased parking charges, considered over a 30 year time horizon. Such measures would typically be used to make it feasible to increase public transport frequency levels or decrease public transport fares. In general it was found to be important that the city transport planning authority had complete control over all transport measures, affecting both private and public transport.

However, such strategies are likely to require significant levels of investment and, given current attitudes towards constraints on public spending, it might be politically awkward for the public sector to raise such finance. There is thus a potentially useful role for private finance to be used to help overcome such (short-term) financing problems. However, it must be appreciated that the private sector will expect to make a profit on such investment. In cities where optimal policies are funded by travellers, the private sector can be reimbursed by travellers. In cities where it is not feasible for travellers to fund all the costs of optimal policies, it will be necessary for the private sector to be reimbursed from public funds (raised from taxes). An important issue here is that the use of private finance should not be allowed to replace optimal policies with sub-optimal policies.

The following recommendations for the design of optimal transport strategies were made in FATIMA (similar respectively equal to the ones in OPTIMA):

- Strategies should be based on combinations of measures, and should draw fully on the synergy between successful measures.
- The key elements of a successful strategy should be public transport measures and car user charges. In most cases, the public transport measures should include increased service levels and/or reductions in fares. However, the degree of such changes will clearly depend on the service and fare levels in the base case. Car user charges can be applied through road pricing or parking charges.

- There should generally be a distinction between peak and off-peak implementation of public transport and car user charge measures.
- Low cost road capacity improvements should generally be included in a successful strategy. However, it should be emphasised that such improvements should come from measures that genuinely improve traffic efficiency, given a fixed level of infrastructure. Such measures would typically include: traffic signal co-ordination and optimisation; telematics measures; and other traffic management measures. Low cost road capacity improvements should not be introduced if they have a negative effect on plans for city centre pedestrianisation, traffic calming in residential neighbourhoods, or enhancements to pedestrian mobility or safety.
- Large-scale public transport infrastructure projects would typically not be part of an optimal strategy. However, medium-scale and small-scale infrastructure projects, such as guided busses or improvements to the public transport vehicle fleet, may be beneficial.
- In some circumstances, optimal policies (in terms of net social benefit) may include both car user charges and increased fares for public transport users (without a corresponding increase in service levels). The implications of this require careful consideration, since they suggest that transport policy can be used to subsidise other areas of public policy.

Policies are tested theoretically with objective functions with less practical reference. Some interesting contents might be extracted for use in WP4.

Materials

- Final report: The final report (116 pages) can be downloaded from the FATIMA homepage <http://www.its.leeds.ac.uk/projects/fatima/> It consists of two parts. Part 1 is directed particularly towards policy makers summarising the policy conclusions and recommendations. Part 2 is mainly aimed at the professional in transport planning and modelling providing the objective functions.

2.8 Results of the TENASSESS Project

TENASSESS Policy assessment of trans-european networks and common transport policy

Description of the project

The objectives of this project were:

- To provide a preliminary policy assessment methodology related to decisions on transport infrastructure investments and service evaluation; more specifically, the aim is to develop a methodology that could be utilised in the assessment of alternatives.
- To provide a comprehensive policy assessment of the European Common Transport Policy (CTP) with a view of advancing forward recommendations that may assist its further development and implementation.
- To provide input and data for further or parallel research on the subject.

Summary concerning

- materials available: Final Report
- experts: ICCR (Liana GIORGI – A), INRETS (Christian REYNAUD – Fr)
- study sites: there are no study sites.
- leading educational institutes: TECHNICAL UNIVERSITY OF DENMARK (DK)
- websites: www.cordis.lu/transport/src/tenasse.htm, www.iccr-international.org/projects/ (TENASSESS – homepage)

Results of the project

In TENASSESS the theme of policy-making has been the centre of considerations. Two decision supporting tools were developed to assist rational thinking:

- The TENASSESS Policy Assessment (PAM) helps assess the degree of congruence between any one project's objectives and that of transport policy from the perspective of different actors' viewpoints – in that it provides an interface between project appraisal and policy assessment.
- The TENASSESS Barrier Model helps identify and anticipate barriers likely to occur during the
- implementation process of any transport policy initiative. It is a dynamic model which can be used in an interactive manner to assist planning and which helps make planners and policy-makers aware of the consequences of their actions in particular planning contexts.

The **main findings of the TENASSESS project** can be summarised as follows:

- Many of the problems encountered in implementing the European Common Transport Policy relate to the variation in the regulatory environments in the field of transport across Member States. The following were identified as of specific importance:
 - the variation in the *distribution of administrative responsibility and competencies* at the national level;
 - the variation in the *degree of planning of transport policy* in the form of master plans but also assessment and/or evaluation frameworks;
 - the variation in the *degree of centralisation* or decentralisation, especially with respect to the role assigned to the regions, hence the process of *territorialisation*, and
 - the variation in the *degree of negotiation* with relevant actors, including citizens' movements or the public at large.

- Three general *conflict areas* which are common to all European countries can be identified. They comprise:
 - *Conflicts about competencies*: Despite the principle of subsidiarity, the borders between the four established political levels – local, regional, national and European – remain diffuse, giving rise to conflicts about competencies.
 - *Thematic conflict 'environment vs. economic development'*: On the one hand there are policies concerned with reducing the negative impacts of traffic for the environment and society and even with reducing transport volume per se; on the other hand there are the policies to improve transport flows in order to further enhance economic development.
 - *Conflicts related to the re-structuring of the transport market*. Currently, and with very few exceptions, deregulation and the privatisation of the transport market is a generally agreed-upon policy agenda.

- It is possible to distinguish four “ideal type” transport policy frameworks:
 - The *traditional transport planning approach* assumes that transport primarily is there to serve structural inequalities as reflected in particular at regional level.
 - A *'modern' variant of the transport planning approach* emerged with the onset of privatisation.
 - The *liberal market approach to transport development* considers it important to regulate the transport sector through primarily economic instruments. Pricing instruments and taxation are under this scheme of particular relevance.
 - The *ecological approach to transport* considers transport development at best a necessary evil. Transport is considered one main source of pollution, therefore infrastructure investment is considered 'bad' – instead what is called for are measures for making it less necessary to travel and strict environmental regulation.

- There are six main issues in the contemporary landscape of European (Common) Transport Policy at the level of implementation of major infrastructure projects:
 - *The problem of the “missing link”*: The main barrier concerns the conflicting national interest of the traversed regions.
 - *The role of the “frontier” or of borderline zones.*
 - *The territorialisation of the decision-making process* and in relation to this the role of regional authorities and the question of risk sharing and responsibility.
 - *The issue of pricing as a strategic notion.*
 - *The problem of financing.*
 - *The role of environmental appraisal.*

- The need for co-ordination emerges as a major issue in the implementation of major transport infrastructure projects. The resolution of conflicts of interest often requires mediation.

- Establishing mechanisms for the participation of citizens in the decision process is one important element of the institutional learning dimension to transport policy. The demands for more participation are in fact the result of decreasing trust in the existing institutions and their representatives.

Materials

- Final report: (224 pages) can be downloaded from the website www.iccr-international.org/projects/

The final report is far too complex and extensive. There are no figures, no tables and a lot of text. Some contents might be taken for producing materials, the summaries of national transport policies may be of special interest.

2.9 Results of the TRANSTALK Project

TRANSTALK Thematic Network on Policy and project Evaluation Methodologies

This project is still in progress.

Description of the project

The objectives of this project are:

- Elaborate a preliminary framework for integration of different policy & project evaluation methodologies,

- Provide guidelines to policy-makers & analysts (i.e. set standards in the field of transport evaluation),
- Effect networking between relevant actors (research, policy, economic) across policy sectors and in this link existing/past research.

Summary concerning

- materials available: non (yet)
- experts: ICCR (Liana GIORGI – A), University of Leeds (Alan PEARMAN – UK)
- study sites: there are no study sites.
- leading educational institutes: University of Leeds (UK), National Technical University of Athens (NTUA) (Gr), University East Anglia (UK)
- websites: www.iccr-international.org/trans-talk/ (TRANSTALK homepage); no link to TRANSTALK on the Cordis-homepage found.

Results of the project

This project is still in progress. It will be finished in June 2001.

Materials

First dissemination is expected in June 2001.

3. RECOMMENDATIONS FOR NEW MODULES

Some project results are quite vague. This may be due to the complexity of the topics/results. It should be possible, however, to extract from the results (mainly final reports) the following:

- Scenarios with different potentials to influence important fields/goals (environment, economy, traffic safety,...) (REFLEX, OPTIMA, FATIMA, ASTRA)
- Acceptance of different measures and scenarios (REFLEX, OPTIMA, FATIMA)
- Rating of the efficiency of policy packages (REFLEX, ASTRA, OPTIMA, FATIMA)
- Guiding tools for policy makers (MAESTRO)
- Checklists for traffic engineers (MAESTRO)
- European Transport Policies (TENASSESS)

4. FINAL CONCLUSIONS

It is not easy to find a clear definition for the key-topic “Implementation and Policy Formulation”. Actually this topic contains a wide range of transport planning issues. Not even the allocated projects, which were assumed to be relevant, were that useful. We would like to discuss our formulation (chapter 2.1) of the definition with all partners.

In fact the materials of the projects were rather vague, most of them too complex, very theoretical and partly without any demonstrative results. Most of them (actually the final reports, which were considered to be the best available materials of the projects) can not be taken directly as course materials. Useful facts and interesting issues have to be extracted out of these materials.

It seems important to add further information from other projects to have a well-balanced overview of this topic.